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THE GAME BIRDS OF INDIA, EURMA AND CEYLON.

BY

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PART XXXIX.

(Continued from page 11 of this Volume.)

Genus-LERWA.

Lerwa Hodgson, Madras. Journ. L. & S., V., p. 300 (1837). Type Perdix lerwa.

Type locality, Nepal.

The genus *Lerwa* contains a single species the plumage of which is constant throughout its range; the wing is pointed and rather short; the second primary is usually the longest, the first and third being equal and very little shorter; in some specimens, however, the first primary is the longest and in others the three first are practically equal; the secondaries reach to within about one inch of the tip of the wing. The tarsi are short and feathered for about half their length in front; the tail consists of fourteen feathers and is slightly rounded at the end.

The sexes are alike in plumage but the male bird possesses a spur, generally short and blunt, occasionally well developed and sharp and, in rare instances only, with indications of a second spur.

LERWA LERWA.

THE SNOW PARTRIDGE.

Perdix lerwa Hodgson, P.Z.S. 1833, p. 107 (Nepal); Gray, Ill. Ind. Zool. II. pl. 44, fig. 1 (1834).

Lerwa nivicola Hodgs., Madras Journ. L. & S., 1837, p. 301; Gould, B. of Asia, VI., pl. 75 (1855); Jerdon, B. of India, III. p. 555 (1863);

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Beavan, Ibis, 1868, p. 382; Swinhoe, P. Z. S. 1871, p. 400 (Moupin); Hume, Nests & Egg. Ind. B., p. 536, (1873); Hume & Marshall, Game B. Ind., II, p. 1. pl. (1879); Marshall, Ibis, 1884, p. 423 (Chamba); Oates' ed. Hume's Nests & Eggs. Ind. Birds, III, p. 428 (1890); Seebohm, Ibis, 1891, p. 380 (W. Sze-chuen); Blanford, Fauna. Brit. Ind., IV., p. 145 (1898); Walton, Ibis, 1906, p. 249 (S. Tibet); Ward, Journ. Bomb. N. H. Soc., XVII, p. 945 (1907) (Kashmir); Whitehead, Ibis, 1909, p. 714 (Kaghan Valley); Whymper, Journ. Bomb. N. H. Soc., XIX, p. 990 (1910), (Garhwal); Whymper, ibid, XX., p. 1160, (1911), (Garhwal); Whymper, Bull B.O.C., XXXV, p. 56 (1915), (Eggs); Hingston, Journ. Bomb. N. H. Soc., XXVII, p. 571 (1921), (Dharmsala); Osmaston, ibid, XXV11I, p. 160 (1921), (Garhwal).

Tetraoperdix (Lerwa) nivicola Hodgson, in Gray's Zool. Misc. p. 85, (1844).

Lerva nivicola Adams, P.Z.S., 1858, p. 501 (High Ranges of Cashmere); Adams, P. Z. S., 1859, p. 186. Ladak.

Lerwa lerwa Ogilvie-Grant, Cat. Birds B. M.,XXII, p. 100 (1895); Ogilvie-Grant, Handb. Game B., I, p., 80 (1895); Oates, Man. Game Birds, I, p. 196 (1898); Bailey, Journ. Bomb. N. H. Soc., XXI, p. 178 (1911), (Chumbi); Kinnear, Ibis, 1922, p. 500 (Mt. Everest); Whistler, Ibis, 1923, p. 628.

Vernacular Names – Lerwa (Bhutea); Janguria (Kumaon); Quoir or Kur Monal (Garhwal); Golabi Bhair, Ter Titar (Bashahr, etc.); Barf ka-Titar (Kulu); Biju (Chamba).

Description.—Whole head, neck and upper plumage barred black and buffy white, the latter suffused with rufous chestnut to a varying extent, more especially on the scapulars and innermost secondaries; primaries brown, tipped and speckled with dull white on the margins of the outer webs, the outermost primaries **so**metimes immaculate, probably in old birds; secondaries brown mottled and barred with white on both webs and broadly tipped with purer white on all but the innermost; tail barred with blackish brown and mottled bars of white; below from the neck deep chestnut, the bases of the feathers marked with black and white; on the breast the white hardly shows but on the flanks and lower abdomen it appears in broad buffy white streaks, extending to the whole of the outer webs on the feathers of the inner flanks; vent and thigh coverts barred black and white and chestnut; under tail coverts chestnut with black shaft stripes and broad white, or creamy white, tips.

Colours of Soft Parts.—Iris brown red to blood red; bill bright coral red; legs and feet orange red to deep red, deepest and brightest in the breeding season.

Measurements.—Total length about 375 to 400 mm.; wing 180 to 205 mm.; tail 118 to 138 mm.; bill 18 to 20 mm.; tarsus 38 to 40mm. The female is about the same in size as the male.

"Weight 16 ozs. to fully 22 ozs." "I have one bird noted as 25 ozs." (Hume.)

Young birds appear to have the chestnut feathers of the breast centred and, more rarely, edged with black.

Young in first plumage are mottled above with dull brown and buffy white, the shafts of the feathers white, showing conspicuously on the scapulars and innermost secondaries; below the whole plumage is mottled pale brown and buffy white with white central streaks on breast and flanks.

Nestling.—Centre of crown and nape, round the eye and posterior cheeks velvety black; remainder of head, throat and sides of neck soft silvery white; upper plumage chestnut brown, a blackish mark down the centre of the back and thighs; below pale buff to chestnut buff.

Distribution.— The Himalayas from the Frontiers of Baluchistan and Afghanistan, East through Sikkim and Tibet to Moupin and Ta-tsien-lu in Western China. This Snow-Partridge seems to be confined to a comparatively narrow strip of country running for an immense distance East and West along the first two or three outer Snow ranges of the Himalayas, it is, however, possible that in Eastern Tibet its area of habitat may broaden out very considerably as Col. F. M. Bailey has met with, and more often heard of, what he believes to be this bird over a very widely scattered area. It is absent from the cultivated and broad plains of Central Tibet though common in Sikkim and the adjacent Ranges South.

Nidification.—The Snow-Partridge breeds throughout its range between 10,000 and 15,000 feet, but apparently much more often above 12,000 feet than below this height. In Garhwal where Mr. S. L. Whymper took a number of nests they were nearly all found at about 14,000 feet; Capt. C. H. T. Whitehead obtained their eggs in the Khagan Valley between 12,500 and 14,000 feet and Col. R. H. Rattray took a nest near Mongtba at about 10,000 feet. In Ladak their eggs have been taken at about 14,000 and in Tibet they certainly breed as high as 15,000 feet. I have also an egg in my collection taken by Buchanan at Parachinar at an elevation of about 11,000 feet.

The site selected for the nest seems invariably to be a steep or even precipitous hillside, devoid of forest but with a scattered growth of grass and perhaps a few bushes and more or less covered with rocks, boulders and loose stones. As a rule quite a good nest is made of moss, grass, leaves, etc., placed in a hollow under the protection of some rock or more than usually rank tuft of grass. The hollow may be either a natural one or one made by the birds but, whether the one or the other, it is nearly always placed near the crest of the hill and always to the leeward side of it. Occasionally the eggs are deposited

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in a hollow without any nest at all, such as that taken by Whitehead in the Khagan Valley, but this seems to be exceptional.

The nests are well concealed, being frequently quite hidden by projecting ledges of rock, and the hen bird is a very close sitter, but Mr. Whymper says that the site is generally given away by the anxiety of the cock-bird at the approach of anything he considers dangerous. Even when not anxious, however, he proclaims the fact that his wife is sitting somewhere close at hand by calling and strutting about in her vicinity.

The breeding season seems to be a long one. Whitehead obtained chicks, well advanced, and fresh eggs on the 2nd and 3rd July respectively on the Afghan Frontier, and Whymper took fresh eggs between the end of May and late June.

The eggs number three to five, perhaps in some cases six or seven, as Wilson records such numbers of chicks seen by him in coveys. In appearance they are very like small, poorly marked eggs of the Khoklas Pheasant. In colour they are a fairly warm buff, the markings consisting of numerous fine freeklings and tiny spots of reddish distributed fairly evenly over the whole surface of the egg. In some cases the specks become small blotches and are then less numerous, though in one or two eggs only are they at all bold or conspicuous. In a few eggs there are also secondary specks and markings of pale lavender and grey, but these are hardly noticeable unless carefully looked for. In shape the eggs are long ovals, in some rather pointed but in the majority rather obtuse.

Fifty eggs average 54.6×35.0 m.; maxima 57.2×35.6 and 54.7×37.0 m.; minima, 48.6×31.6 m.

General Habits.—The Snow-Partridge is essentially a bird of the Snowy ranges whose lower slopes are well covered with forest and where, on the steep and rocky region below the snow line, there is a certain amount of grass, bush, moss and other vegetation. Where there are wide desert plateaus, more or less level or undulating and practically devoid of all green growth on account of the want of rain, the Snow-Partridge will not be found. This is well shewn by Col. Bailey's list of Game-birds shot during four years in Chambi and Gyantse, which contains not a single record of *Lerwa*. It is a bird of the highest levels and in Summer will rarely be found below 12,000 feet, whilst it must be noted that the members of the Everest Expedition, according to Wollaston, did not observe it, even at this season below 17,000 feet. In Winter it is said to occur as low as 7,000 feet but presumably this must be most exceptional.

The Snow-Partridge is entirely vegetarian, living on moss and the young shoots of plants, but doubtless from time to time they also eat a certain number of insects and, possibly, as with all the true partridges, the chicks are fed on insects only at first.

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Their call is a loud harsh whistle, constantly repeated, and both the alarm note and ordinary call, one to another, seems only to vary in loudness and harshness. When with the young both sexes have a lower, softer note, the chicks replying with a "cheep" much like that of the baby barn-door fowl.

Since Hume's time we have learnt a good deal more about the nidification and distribution of this handsome bird and it is also undoubtedly known to a much wider circle of sportsmen now than it was in his time. Alas, none of these sportsmen have attempted to record the results of their experience and we are still left with Hume's account of the shooting of the Snow-Partridge as the only one available. It is, however, one of the most charming of his many charming notes and is more than well worth repetition. He writes :---

"Although in severe winters, and after heavy falls of snow, crowds of Snow-Partridges may be met with at from 7,000 to 9,000 feet elevation, Indian sportsmen, as a rule, never meet with them, except in their summer haunts, at elevations of from 10,000 to even 14,000 feet; and they are so invariably seen in grounds frequented by Tahr and Burrel, that, though one of the very best of Indian birds for the table, they are but rarely shot.

It is generally close up under the snow, amidst grey crags and heary precipices, or on tiny plots of stunted herbage, girt round by huge boulders and rugged blocks of rock, amidst which the snow still lies thickly, and at an average elevation of 11,000 feet (at any rate from May to September) that this Ptarmigan-like Partridge is to be found.

It is very locally distributed; you may march for a couple of days, passing through or near the most likely spots and never see or hear a bird; and again you may see a hundred in a day's march, or one party, or at most two parties, daily for a week.

Like many others of our game birds, they are (where not worried) tame enough where they are numerous (as if they realized that a few more or less would not endanger the continuance of the race), while, where scarce, they are apt to be shy and wary. Along routes frequented by sportsmen, and after they have been shot at for several successive days, I have found them (*pace* my old friend Wilson, whose remarks I shall quote later) the reverse of tame.

In the spring they are usually in pairs, but it is not uncommon to find a dozen such in a couple of hours' walk. Later they are in coveys of from seven to thirty, eld and young, and by the end of September many of the latter are almost full grown.

Their flight is rapid and strong, much like that of a Grouse; and if met with in comparatively unfrequented spots, they often afford superb sport. Out of a good covey, you get at first no doubt only a right and left, and even though somewhat scattered, the whole of the birds rise at the second if not the first shot; but though they go off at a great pace and sweep down towards the valley for a while, they soon curve upwards again and alight at po great distance from where you flushed them, and at much the same level as before. If it be a smooth bare hill side, near the limits of vegetation—and you do find them in such places—the same process has to be repeated, and the trudge after each shot becomes longer and longer; but if they alight (then usually much scattered) amongst rocks and stones, where they can squat unseen, you may get half a dozen in single and double shots (the birds often flustering up close to your feet) before the remainder make up their minds to a simultaneous change of quarters.

Glorious sport may be enjoyed after the Snow-Partridge. Above, snowy domes and peaks, glistening sharp-cut against the blue sky; below, almost under one's feet, and stretching away for miles, a sea of green forest; in front, alternate patches of close shaven mossy turf, starred with a few alpine blossoms, and bare slaty slabs, those in the shade still silvered by the morning's frost—all sloping at a frightful angle, and traversed by little silent snow runlets and long streaks of partly discoloured snow, running down tiny gorges. As you halt to reconnoitre and rest a moment, perfect stillness seems to reign around. There are few signs of life; one little yellow butterfly fluttering here and there; by the mossy margin of a tiny trickling rill a few delicately-tinted Horned Larks (Otocorys longirostris) and a flock of Snow Chats (Grandala coelicolor), the males glistening sepphire-like against the snow as they dart away on powerful wings. From the depths beneath, the lowing of cattle steals upwards, mellowed by the distance and mirgled with faint murmurs from the torrents below; a bee or two pass humming softly; a stone clatters down over the shale; the surging murmur of some distant avalanche creeps along the hill side, and then again a stillness as of death pervades the scene.

Suadenly from the bare rocks in front out rings a loud whistle and then another, and another; and again all is still. It is not good walking; and just between you and the whistlers, stones and snow keep every now and then coming down, as if preparatory to an avalanche; you have to mind your feet; it is impossible to say which is more slippery, the stones or moss, and a single false step would shoot you some two or three thousand feet into the birch trees below; but the whistle bursts out, not fifty yards away with redoubled energy, echoing harshly amongst the crags. You push on, half sliding, to a little plateau close to where the whistle sounded; you scrutinize intently the purplish grey stones in front;

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you cough, raise your gun; still nothing is to be seen. But the dog's eves, as he stands(his chain held by a Pahari) shivering with excitement, are almost starting from his head; a look to the man and the old smooth-haired, liver-coloured setter (ab ! dear companion of many, many happy days!) is sneaking forward, almost like a prowling cat; but only for a few paces then he stands immoveable. Again you wait ; a few steps only and the foothold may be such that firing would be impossible; a Pahàri heaves a big stone a few yards in front of the dog's nose; presto! as if by one impulse, in one lump, with the clatter of a hundred Partridges, up springs a covey; they rise perpendicularly about three yards and your first barrel rakes them, dropping three ; the second catches the hindermost bird as they sweep down the hill-side. The first three lie amongst the rocks, the last first touches ground five hundred feet below. But there is no time to think of him. Before the echoes of the shots have died away, a growl, as if of anger at being disturbed, at first low, but growing louder every second, floats down the peaks above ; a rolling cloud, a confused mist of snow, in which a few black specks are discernable, is coming straight down on you. You reach the birds, when with a surging swish and mighty clatter, down rushes the avalanche, stray fragments of stone striking, and the skirts of the snow sweeping, even the little plateau whence you fired. A near thing, but the birds have been marked down less than a quarter of a mile ahead, a little higher and in much better ground than that where you found them; and sending a man, and dog down to recover the bird below, you push on recklessly over ground that, at other times, you would cross at a snail's pace, until again the harsh whistle warns you that the game is at hand. And now, if you have luck, you will get, within the space of two hundred yards, from three to six as fine shots, singles and doubles as ever gladdened the heart of a sportsman; and even if you cannot follow this covey up a third time, you may probably, if you are in one of their head quarters, find another, and another; and besides picking off three or four Snow Cocks with a rifle, and possibly (because all the firing in the world will not at times prevent such suddenly cropping up before you) a Tahr or a Burrel, you may take ten to fifteen brace of these splendid Snow-Partridges down with you to your camp in the forest below. A few days later, discussing some of these (cooked gipsy fashion) beside the perfumed blaze of a deodar bon-fire, the most miserable victim of ennui would be compelled to confess that there was still something to live for."

[[]We are pleased to be able to announce that Mr. Stuart Baker proposes to continue this interesting and popular serial with a series of illustrated articles dealing with the Wading Birds.—EDS.]